

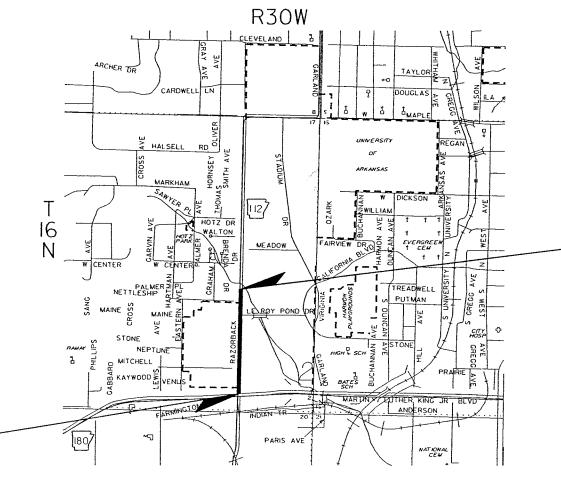
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT CONSTRUCTION PLANS FOR STATE HIGHWAY

# HWY.180 - LEROY POND DR. (HWY.112)

(FAYETTEVILLE) (S)

WASHINGTON COUNTY ROUTE 112 SECTION 0 F.A.P. NO. STP-STPU-9142(31) JOB 040581

NOT TO SCALE



ARKANSAS HWY. DIST. 4

DISTRICT 8

• DESIGN TRAFFIC DATA •

FED.RD. STATE FED.AD PROJ.NO.

040581 (2) HWY. 180 - LERDY POND DR. (HWY.112)

DISTRICT

6 ARK.

(FAYETTEVILLE) (S)

DISTRICT

DIRECTIONAL DISTRIBUTION ----- 60% DESIGN SPEED ------ 40 MPH

APPROVED



P.E. JOB 040418

STA. 121+75.00 END JOB 040581 (RAZORBACK ROAD)

### PROJECT COORDINATES:

STA. 103+01.10 BEGIN JOB 040581 (RAZORBACK ROAD) LOG MILE =1.474

	BEGIN	MID-POINT	END
LAT.	N36° 03′ 24″	N36° 03′ 33″	N36° 03' 43"
LON.	W94° 10′ 50"	<b>W</b> 94° 10′ 49"	W94° 10′ 49″

GROSS LENGTH OF PROJECT 1873.90 FEET OR 0.355 MILES LENGTH OF ROADWAY 1873, 90 FEET OR 0, 355 MILES NET LENGTH OF BRIDGES 0.00 FEET OR 0.000 MILES LENGTH OF PROJECT 1873.90 FEET OR 0.355 MILES

SUMMARY	OF	QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	ИМІТ
201	CLEARING	10	STATIO
201 202	GRUBBING REMOVAL AND DISPOSAL OF CURB	10	STATIO
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER	839 1784	LIN. FT
202	REMOVAL AND DISPOSAL OF WALKS	992	SQ. YE
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS	2	EACH
202	REMOVAL AND DISPOSAL OF JUNCTION BOXES REMOVAL AND DISPOSAL OF DROP INLETS	1	EACH
202	REMOVAL AND DISPOSAL OF DROP INLETS	10 18	EACH EACH
202	REMOVAL AND DISPOSAL OF BOX CULVERTS	1	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE DITCH PAVING	4	SQ. YE
202	REMOVAL AND DISPOSAL OF LUMINAIRE POLE AND FOUNDATION REMOVAL AND DISPOSAL OF SIGNS	44	EACH
202	REMOVAL AND DISPOSAL OF SIGNS REMOVAL AND DISPOSAL OF HANDRAIL	2 20	EACH LIN. F
202	REMOVAL AND DISPOSAL OF BOLLARDS	5	EACH
202	REMOVAL AND DISPOSAL OF PARKING METERS	5	EACH
206 210	FLOWABLE SELECT MATERIAL UNCLASSIFIED EXCAVATION	228	CU, YE
210	COMPACTED EMBANKMENT	2071 5246	CU. YE
SS & 303	AGGREGATE BASE COURSE (CLASS 7)	82	TON
309	PORTLAND CEMENT CONCRETE BASE (5" UNIFORM THICKNESS)	1421	SQ. YI
401 SP, SS, & 405	TACK COAT	1319	GAL.
SP, SS, & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2") ASPHALT BINDER (PG 64-22) IN ACHM BASE COURSE (1 1/2")	1592	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")	66 784	TON TON
SP, SS, & 406	ASPHALT BINDER (PG 64-22) IN ACHM BINDER COURSE (1")	34	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	2522	TON
SP, SS, & 407 SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2") ASPHALT BINDER (PG 70-22) IN ACHM SURFACE COURSE (1/2")	132	TON
412	COLD MILLING ASPHALT PAVEMENT	132 1078	TON SQ. YI
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	9	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	25	TON
505 601	PORTLAND CEMENT CONCRETE DRIVEWAY MOBILIZATION	129.77	SQ. YI
SP & 602	FURNISHING FIELD OFFICE	1.00 1	LUMP S EACH
SP, SS, & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SI
SS & 604	SIGNS	370	SQ. F
SS & 604 SS & 604	BARRICADES TRAFFIC DRUMS	32 100	LIN, F
SS & 604	CONSTRUCTION PAVEMENT MARKINGS	7984	EACH LIN, F
SS & 604	CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	1	EACH
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	563	LIN. F7
604 604	REMOVAL OF PERMANENT PAVEMENT MARKINGS REMOVAL OF PERMANENT PAVEMENT MARKINGS (WORDS)	205	LIN. FT
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS)	3 3	EACH EACH
SS & 604	VERTICAL PANELS	52	EACH
SS & 606 SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	20	LIN. FT
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)     (ALTERNATE NO. 1)       18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE     (ALTERNATE NO. 2)	2108 2108	LIN, FT
SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	14	LIN. FT
SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	7	LIN. FT
606 SS & 606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	7	LIN, F7
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) 30" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	1027 1027	LIN. F
SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	52	LIN. F
SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	296	LIN. F
606 SS & 606	36" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2) 42" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	296	LIN. F
606	42" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)   42" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	364 364	LIN. F
SS & 606	60" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	204	LIN. F
SS & 606	12" SIDE DRAIN	618	LIN. F
606 606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS SELECTED PIPE BEDDING	1	EACH
609	DROP INLETS (TYPE C)	200 10	CU. YI
609	DROP INLETS (TYPE E)	3	EACH
609	DROP INLETS (TYPE MO)	17	EACH
609 609	DROP INLETS (TYPE ST) JUNCTION BOXES (TYPE E)	1 10	EACH
609	DROP INLET EXTENSIONS (4')	16 8	EACH EACH
609	YARD DRAINS	7	EACH
611	4" PIPE UNDERDRAINS	500	LIN. F
615 SS & 620	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)  MULCH COVER	48.3	CU. Y
SS & 620	WATER	3.13 119.0	ACRE M.GAI
621	TEMPORARY SEEDING	3.13	ACRE
621	SLT FENCE	1099	LIN. F
621 621	SAND BAG DITCH CHECKS DROP INLET SILT FENCE	220	BAG
621	SEDIMENT BASIN	1400 32	LIN, F
621	OBLITERATION OF SEDIMENT BASIN	32	CU. YI
621	SEDIMENT REMOVAL AND DISPOSAL	144	CU. YI
621 624	ROCK DITCH CHECKS SOLID SODDING	30	CU. YI
626	EROSION CONTROL MATTING (CLASS 3)	4369 300	SQ. YI
633	CONCRETE WALKS	2765	SQ. YI
633	CONCRETE WALKS (TYPE SPECIAL)	845	SQ. YI
633	HAND RAILING CONCRETE CURB (TYPE D)	713	LIN. F
634		570	LIN. F

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB	NO.	040581	22	106
			(2)	SUMMA	RY OF	<b>OUANTITIES AN</b>	D REVISI	ONS

### SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
641	WHEELCHAIR RAMPS (TYPE 2)	66	SQ, YD,
SP & 701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2 (8 PHASES)	1	EACH
SP	LOCAL RADIO WITH ANTENNA	1	EACH
SP	ANTENNA CABLE (TYPE 6)	70	LIN, FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED. (3 SECTION, 1 WAY)	6	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	1	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	4	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1194	LIN, FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	59	LIN, FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	245	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	125	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	416	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)	135	LIN, FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	20	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	411	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	20 ·	LIN. FT.
710	NON-METALLIC CONDUIT (3")	389	LIN, FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	2	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	4	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (20')	11	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (28')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44'-44')	1	EACH
SP	LUMINAIRE ASSEMBLY	3	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	2	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	11	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (4")	1980	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	513	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	6045	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	8	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	8	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKNING (SHARED LANE MARKING)	10	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	81	EACH
SP	18" STREET NAME SIGN	3	EACH
SP & 733	VIDEO DETECTOR (CLR)	6	EACH
733	VIDEO CABLE	720	LIN. FT.
733	VIDEO MONITOR (CLR)	1 1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP & 733	VIDEO EDGE CARD EXTENDER	11	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	11	EACH
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	8	CU, YD.
802	CLASS S CONCRETE-ROADWAY	10.71	CU. YD.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	1256	POUND

### REVISIONS

DATE	REVISION	SHEET NUMBER

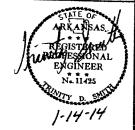
# TRAFFIC SIGNAL QUANTITIES

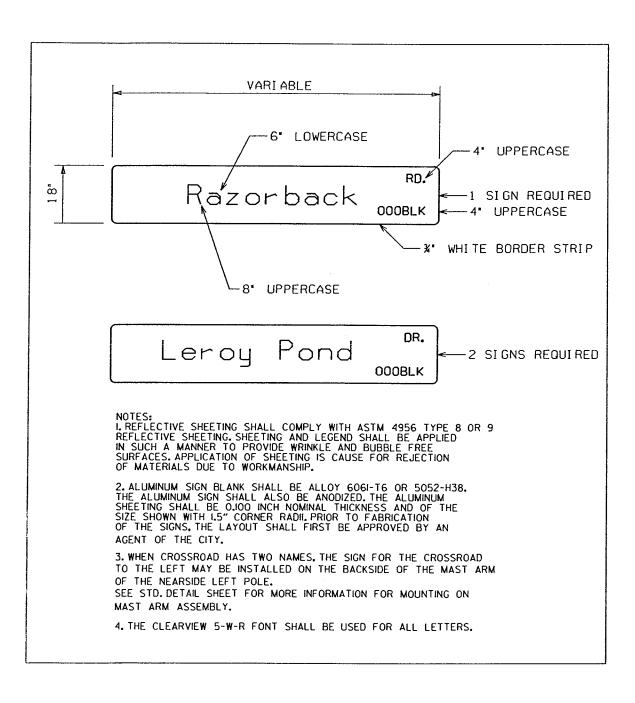
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ITEM NO.	ITEM	OUANTITY	UNIT
SP& 701	1	1	EACH
SP& 706	The state of the s	6	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, I WAY)	1	EACH
SP&707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	4	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1194	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	59	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	245	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	125	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (3")	389	LIN. FT.
SS& 78	CONCRETE PULL BOX (TYPE 2 HD)	4	EACH
SS& 711	CONCRETE PULL BOX (TYPE 2)	2	EACH
SS&714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (201)	1	EACH
SS& 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (28')	l	EACH
SS&714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44'-44')	ı	EACH
SS&715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	2	EACH
733	VIDEO CABLE	720	LIN. FT.
SP& 733	VIDEO DETECTOR (CLR)	6	EACH
SP&733	VIDEO EDGE CARD EXTENDER	1	EACH
733	VIDEO MONITOR (CLR)	ı	EACH
SP&733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP&733	VEHICLE DETECTOR RACK (I6 CHANNEL)	1	EACH
SP	ANTENNA CABLE (TYPE 6)	70	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	411	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (IC/8 A.W.G., EGC)	416	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (IC/12 A.W.G., EGC)	135	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	20	LIN. FT.
SP	LOCAL RADIO WITH ANTENNA		EACH
SP	LUMINAIRE ASSEMBLY	3	EACH
SP	18" STREET NAME SIGN	3	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
- OLIANITA	TIES INCLUDE ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO DEOCESSE		

<sup>.</sup> QUANTITIES INCLUDE ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO PROCESSOR.

	DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RO. DIST.MO.	STATE	FEO.AIO PROJUNO.	SHEET NO.	TOTAL SHEETS
					6	ARK.			
Į					906	NO.	040581	32	106

2 SIGNALIZATION PLAN SHEET





LOCATION:

HWY. 112 (RAZORBACK RD.) /LEROY POND DR.

CITY:

FAYETTEVILLE

COUNTY: WASHINGTON

DISTRICT: 4 SCALE: N/A

DRAWN BY: GWE

DATE: 12-20-13 FILE NAME: 1040581.dgn

## TRAFFIC SIGNAL NOTES:

- PERFORM ELECTRICAL WORK IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (2014) NATIONAL ELECTRICAL CODE, NFPA 101 (2012) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.
- 2. EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (EGC) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND EGC TO GROUND LUG OF CONTROL CABINET AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TO-GROUND BOND EXISTS IN THE SYSTEM AND THAT IT IS AT THE MAIN BREAKER.
- 3. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. IF THE SERVICE POINT IS OVER 10 FEET FROM THE CONTROLLER, THE CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE TWO CIRCUIT EXTERNAL BREAKER (SECONDARY BREAKER) ON OR NEAR THE TRAFFIC SIGNAL CONTROLLER CABINET AND SHALL INSTALL CONDUIT, ELECTRICAL SERVICE WIRE (2c/\*6 USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S MAIN BREAKER AS PART OF THIS CONTRACT. CONDUIT IS PAID FOR AS A SEPARATE ITEM OF THIS CONTRACT TWO CIRCUIT BREAKERS CONSIDERED SUBSIDIARY TO THE CONTROL FOLIPMENT WHERE STREET LIGHTING CONTRACT. TWO CIRCUIT BREAKERS, CONSIDERED SUBSIDIARY TO THE CONTROL EQUIPMENT WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2c/\*12 AWG UF RATED, TYPICAL) SHALL BE KEPT FROM THE CIRCUIT SERVING THE TRAFFIC SIGNAL CONTROL EQUIPMENT FROM THE POINT OF TIE-IN AT THE SECONDARY BREAKER PROVIDED BY THE CONTRACTOR.
- 4. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.
- 5. TRAFFIC CONTROLLER CABINET SHALL HAVE 16 LOAD BAYS AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER.
- 6. CONTROLLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS.
- 7. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARDS AND DETAILS, AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITIONS.
- 8. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD MAY BE USED.
- 9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.
- 10. PAVEMENT MARKING SHOWN FOR REFERENCE ONLY. SEE PAVEMENT MARKING PLAN SHEETS.
- II. FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENTS FOR SIGNAL HEAD CLEARANCE ABOVE ROADWAY ONLY AT LOCATIONS WHERE THE GROUND ELEVATION AT THE POLE IS BELOW THE ELEVATION OF THE ROADWAY (SEE NOTES ON SPECIAL DETAILS). PAYMENT WILL BE INCLUDED IN SECTION 714, AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- 12. ALL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE 3" DIAMETER UNLESS SPECIFIED ON PLANS.
- 13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.
- 14. LUMINAIRE ASSEMBLIES SHALL BE OF THE FULL CUTOFF TYPE.
- 15. HARDWARE INPUTS MAY BE DETERMINED BY SUPPLIER, EACH DETECTOR OUTPUT SHALL INPUT THE CONTROLLER THROUGH A SEPARATE INPUT UNLESS OTHERWISE NOTED AND BE PROGRAMMED TO ACTUATE THE ASSOCIATED PHASE, COMBINATION (COMB.) DETECTORS SHALL ALSO BE PROGRAMMED TO PROVIDE VEHICLE
- I6. THE LOCAL RADIO WITH ANTENNA SHALL BE COMPATIBLE WITH THE EXISTING CLOSED LOOP COORDINATION SYSTEM IN THE CITY. THE EXISTING SYSTEM CONSISTS OF A PEEK CLOSED LOOP TRAFFIC CONTROL SYSTEM WITH COMMUNICATIONS UTILIZING A MDS 9710 FIXED FREQUENCY RADIOS.
- 17. TO DETERMINE UTILITY CLEARANCES ABOVE THE TRAFFIC SIGNAL POLE, REFER TO THE POLE SCHEDULE FOR VERTICAL SHAFT HEIGHT. WHERE THE POLE SCHEDULE INDICATES THAT A LUMINAIRE ARM WILL BE USED. 38 FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE LUMINAIRE ARM. WHERE THE POLE SCHEDULE INDICATES A TRAFFIC SIGNAL POLE WITHOUT A LUMINAIRE ARM, A HEIGHT OF 21'SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL 6 FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANC THE SIGNAL PLANS.
- 18. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS 6 FEET. REFER TO TRAFFIC SIGNAL PLANS FOR SPECIFIC LOCATION OF POLES, CONTROLLER AND ANY OTHER NON-BREAKAWAY OBSTRUCTIONS. REFER TO "DESIGN PARAMETERS, MINIMUM CLEAR ZONE DISTANCE" FOR MINIMUM DISTANCE FROM THE EDGE OF TRAVELED WAY TO THE FACE OF A NON-BREAKAWAY POLE OR OBSTRUCTION. TRAFFIC SIGNAL POLES OR ANY OTHER NON-BREAKAWAY OBSTRUCTION SHALL NOT BE INSTALLED WITHIN THE CLEAR ZONE.
- 19. AS DETERMINED BY THE ENGINEER, FOUNDATION EMBEDMENT MAY BE DECREASED BY A MAXIMUM OF TWO FEET IF COMPETENT ROCK IS ENCOUNTERED PRIOR TO ACHIEVING PLAN EMBEDMENT AND AT LEAST HALF OF THE REMAINING PLAN EMBEDMENT LENGTH IS KEYED INTO COMPETENT ROCK.
- 20. CONNECTION OF TRAFFIC SIGNAL DISPLAY TO FIELD WIRING SHALL UTILIZE AN APPROVED TERMINAL STRIP BEHIND HAND-HOLE COVER AT BASE OF POLE. TERMINAL STRIP SHALL PROVIDE PROTECTION TO PREVENT EXPOSURE TO THE PUBLIC IN THE EVENT THAT POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714-TRAFFIC SIGNAL MAST ARM AND POLE WITH
- 21. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO ISMA STANDARDS.
- 22. ONE VIDEO PROGRAMMING MODULE SHALL BE PROVIDED FOR AIMING AND SETUP OF DETECTORS IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.
- 23. TRAFFIC SIGNAL CONTRACTOR MUST NOTIFY RESIDENT ENGINEER OR ASSIGNED DEPARTMENT PROJECT INSPECTOR EACH DAY PRIOR TO SIGNAL RELATED WORK, NO WORK ON TRAFFIC SIGNALS WILL BE ALLOWED OR APPROVED WITHOUT THIS PRIOR NOTIFICATION.
- 24. ALL STEEL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

DATE REVISED	DATE FAMED	DATE REVISED	DATE FILMED	FED.RO. DIST.NO.	STATE	STATE FEO.MO PROJUNO.		TOTAL SHEETS
				6	ARK.			
				J08	NO.	040581	33	106

(2) SIGNALIZATION PLAN SHEET

REGISTIONAL PROFESSIONAL ENGINEER N. 11725 1-14-14

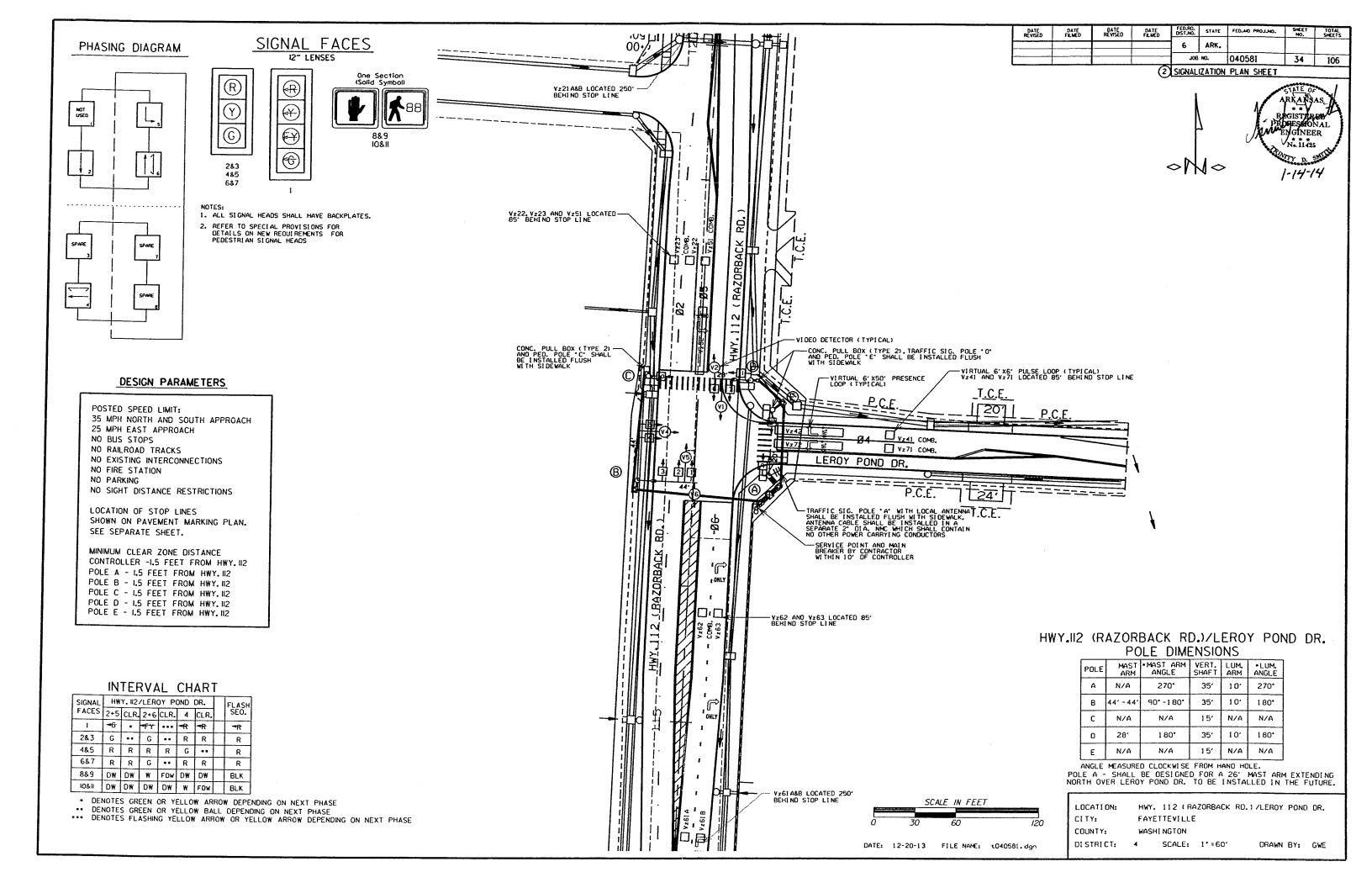
LOCATION: CITY:

HWY. 112 (RAZORBACK RO.) /LEROY POND DR.

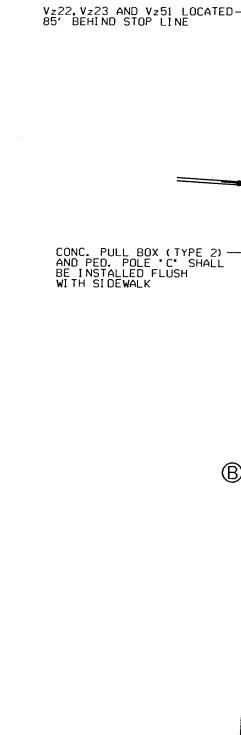
**FAYETTEVILLE** 

COUNTY: WASHI NGTON DISTRICT: 4 SCALE: N/A

DRAWN BY: GWE



# TRAFFIC FLOW DIAGRAM 543 (543) 37 (96) 19 (64) LEROY POND DR. 169 (148) 272 (575) LEGEND: (PEAK HOUR) EXISTING (2008) PEAK HOUR TRAFFIC VOLUMES



HWY. II2	(RAZORBACK	RD.)/LEROY	POND	DR.
	POLE L	OCATIONS		

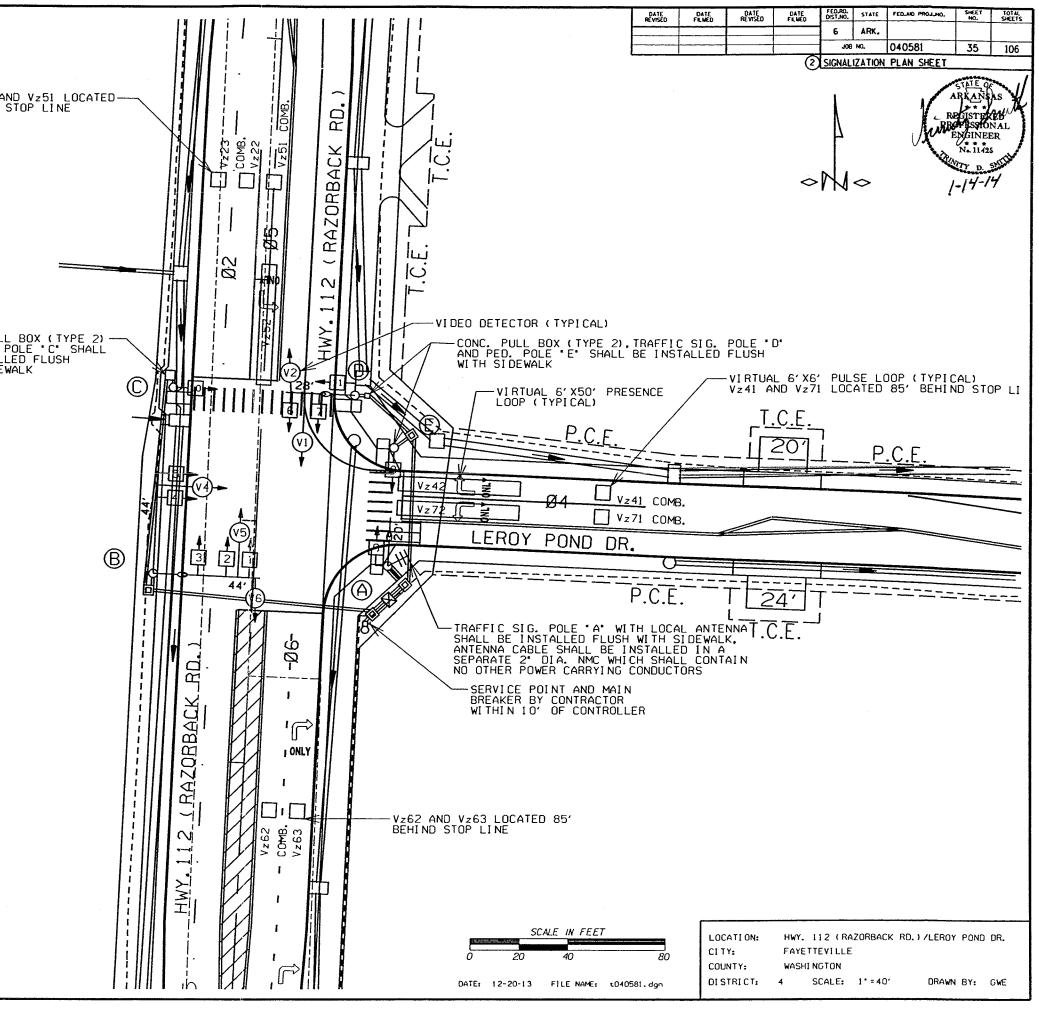
ANTENNA ORIENTATION HWY. 112/LEROY POND DR.

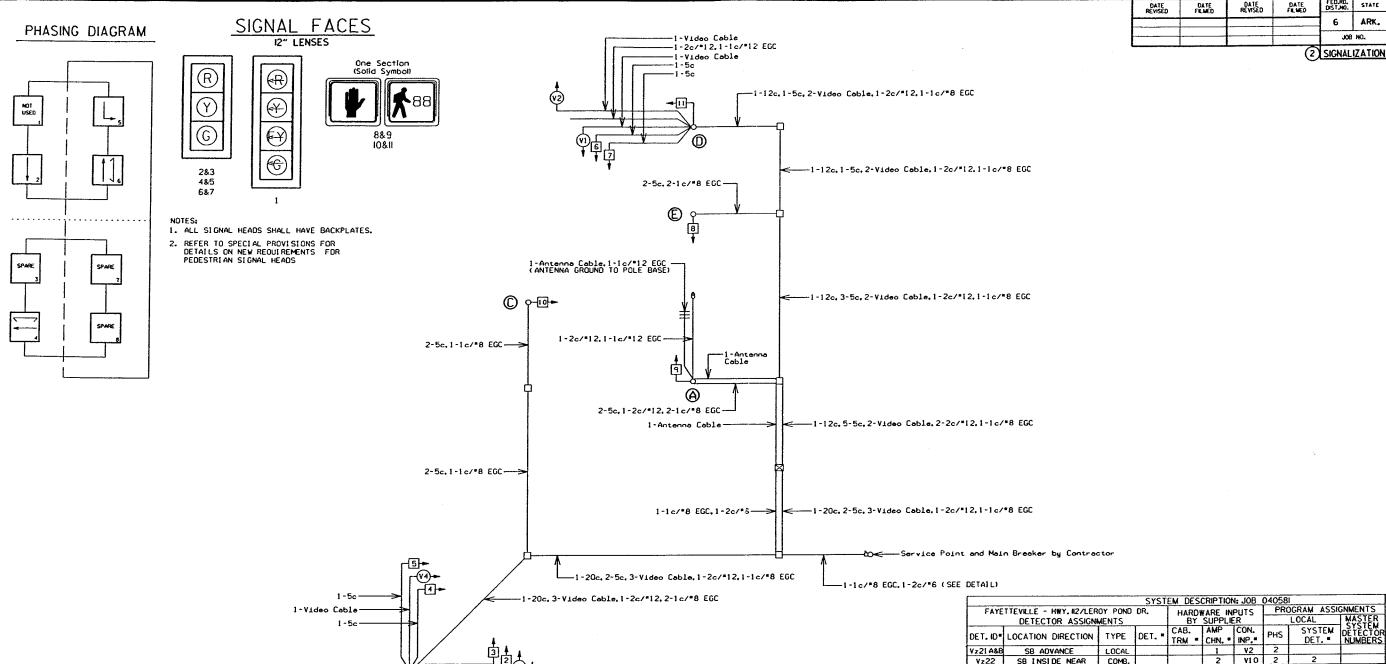
ORIENTED TO MASTER ANTENNA

LOCATED ON MT. SEQUOYAH

81 . 40, 21 .

POLE	LOCATION & STATION	OFFSET	X.Y COORDINATES
А	HWY. 112 - STA. 116+83.70	55' RT.	668045. 60, 635888. 54
В	HWY. 112 - STA. 116+76.45	42'LT.	667949. 70, 635885. 51
С	HWY. 112 - STA. 117+53.70	37' LT.	667957. 48, 635962. 50
D	HWY. 112 - STA. 117+53.74	38' RT.	668031 . 88, 635959. 26
E	HWY. 112 - STA. 117+32.65	55' RT.	668047. 84. 635937. 44





1-5c

1-7c-

1-Video Coble

1-2c/\*12,1-1c/\*12 EGC-1-Video Coble-

PATE	PATELLEVICE - NWT. #27ERUT PUNU UN.		HARDWARE INPUIS L			0011718 X331			TUBE		
	DETECTOR ASSIGN	MENTS			SUPPLIE			LOCAL	MASTER	COMMENTS	1
DET.ID*	LOCATION DIRECTION	TYPE	DET. *	CAB. TRM =	AMP CHN. *	CON.	PHS	SYSTEM DET. *	SYSTEM DETECTOR NUMBERS		LENGTH
Vz21 A&B	SB ADVANCE	LOCAL			1	٧2	2			CAMERA V2	74-
Vz22	SB INSIDE NEAR	COMB.			2	V1 0	2	2		CAMERA V5	23*
Vz23	S8 OUTSIDE NEAR	COMB.			3	V1 1	2	3		CAMERA V5	23°
Vz41	WB RIGHT ADVANCE	COMB.			11	V1 2	4	4		CAMERA V4	23*
Vz42	WB RIGHT TURN	LOCAL			12	V4	4			CAMERA V4	23*
Vz5i	SB LT. TURN ADVANCE	COMB.			5	V1 3	5	5		CAMERA V5	23*
Vz52	SB LEFT TURN	LOCAL			6	V5	5			CAMERA V5	23*
Vz61 A&B	NB ADVANCE	LOCAL			13	<b>v</b> 6	6			CAMERA V6	74*
V262	NB INSIDE NEAR	COMB.			14	V1 4	6	6	l	CAMERA VI	23*
Vz63	NB OUTSLDE NEAR	COMB.			15	V16	6	8		CAMERA VI	23
Vz71	WB LEFT ADVANCE	COMB.			9	V15	4	7		CAMERA V4	23*
Vz72	WB LEFT TURN	LOCAL			10	٧7	4			CAMERA V4	23*
PB4A&B	LEROY POND DR.	PED.					4				
PB6A&B	HWY. 112 N. LEG	PED.					6	L			
				SPARE 4, 7, 8&16							

# CONTROLLER INPUT ABBREVIATIONS: V = VEHICLE INPUT

- D = SYSTEM OR AUXILIARY INPUT
- P = PECESTRIAN INPUT

NOTE: "AMP CHN" REFERS TO THE DETECTOR RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.

LOCATION:	HWY.	112	( RAZORBA	ACK R	D. ) /LE	ROY	POND	DR
CITY:	FAYE	TTEVI	LLE					
COUNTY.	MACHI	NOT	ON!					

STATE

ARK.

2 SIGNALIZATION PLAN SHEET

6

JOB NO.

DATE

DATE REVISED

DATE REVISED

DATE

FED.AID PROJUNO.

36 106

1-14-14

040581

DATE: 12-20-13 FILE NAME: t040581.dgn

DISTRICT: 4

SCALE: N/A DRAWN BY: GWE

DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
 DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
 DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

INTERVAL CHART

-6 • <del>-F</del>Y ••• <del>-R</del> <del>-R</del>

RRRRG ••

R R G •• R R

10&11 DW DW DW DW W FDW BLK

DW DW W FOW DW DW BLK

SIGNAL HWY. 112/LEROY POND DR.

FACES 2+5 CLR. 2+6 CLR. 4 CLR.

2&3 G •• G •• R R

WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.

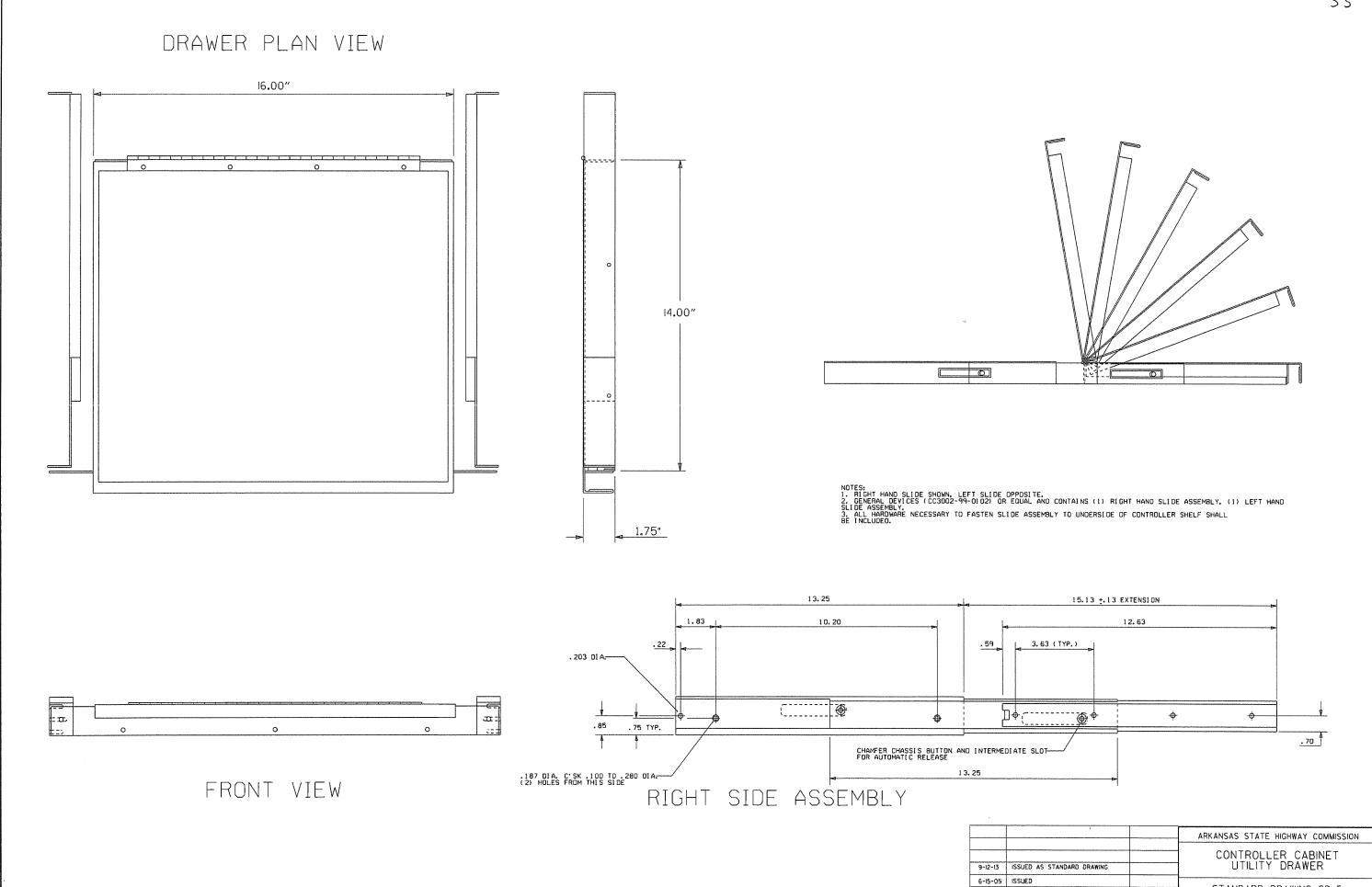
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.

3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

STANDARD DRAWING SD-5

REVISION

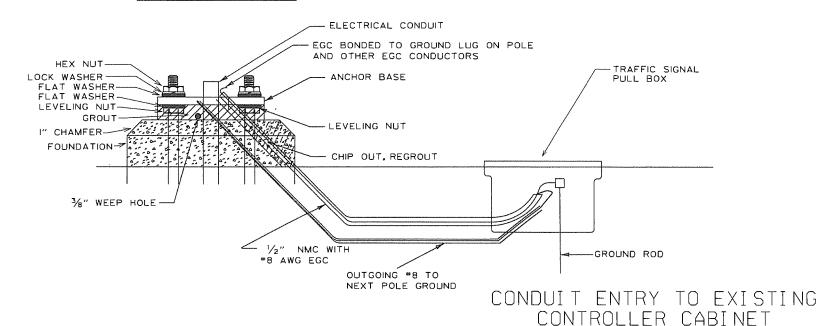
DATE FILM

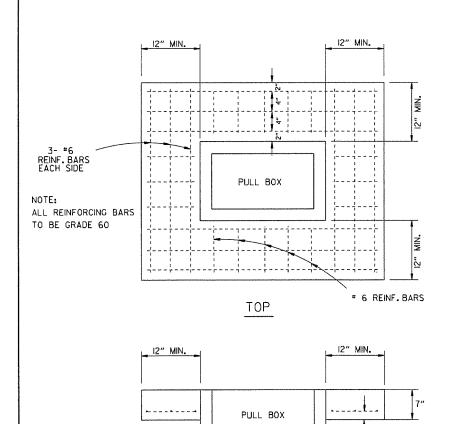


# CONDUIT ENTRY TO EXISTING POLE BASE

# 

# ANCHOR BASE





ELEVATION

3″

TYPE "S" CONCRETE

TYPE "HD" PULL BOX

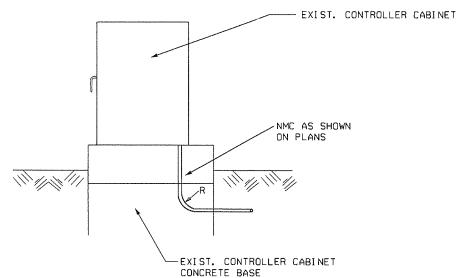
12" (305 MM)

EARTH

TYPE "HD" CONCRETE PULL BOX DETAIL

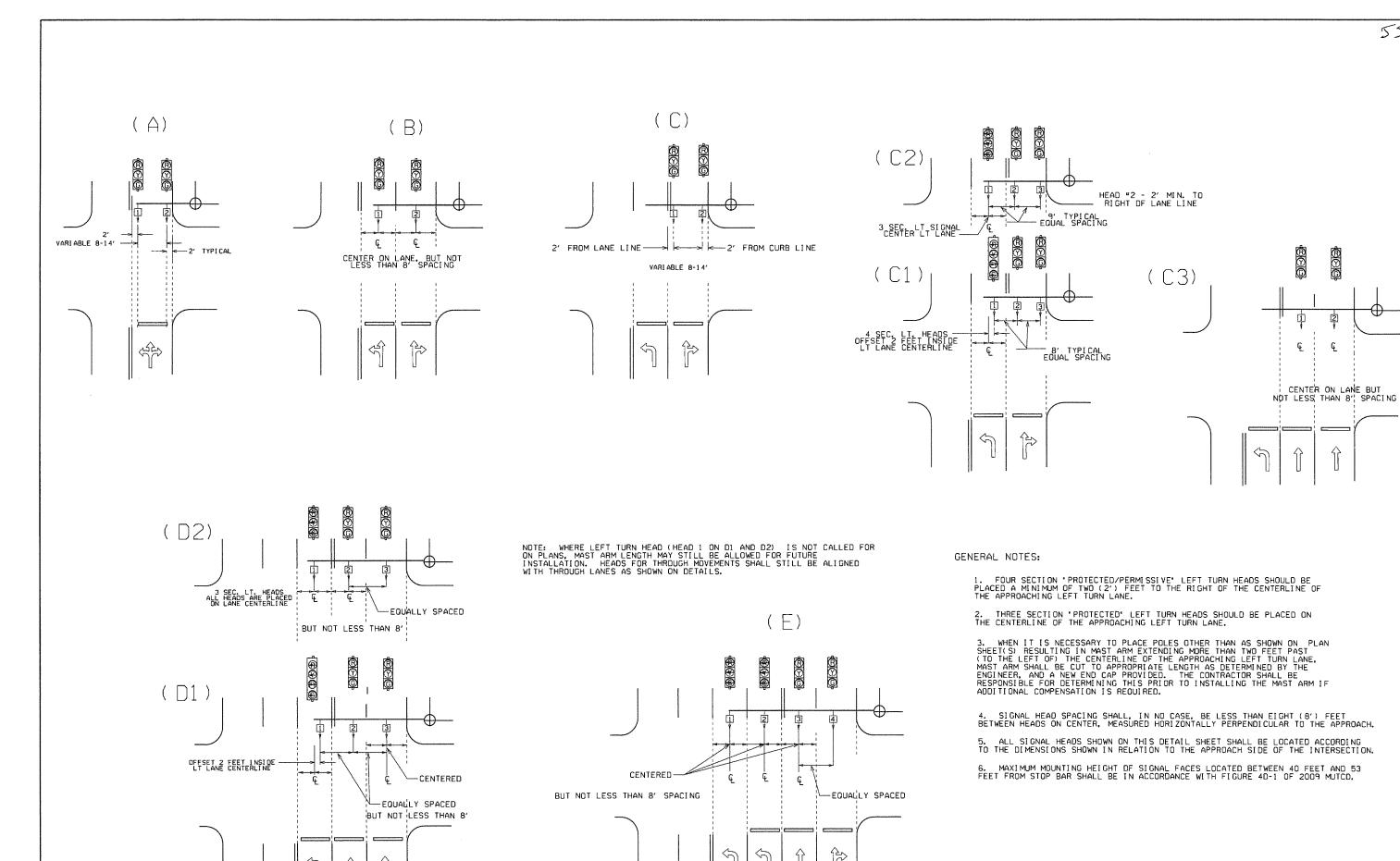
NOTE: ALL TYPE IAND TYPE 2 HD PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" (305 MM) WIDE AND 6" (152 MM) IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD PULL BOX. PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S." THREE "6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE PULL BOX IS REQUIRED IN CONCRETE.

2" CLEAR FROM TOP (TOLERANCE +/- 0.5 ")



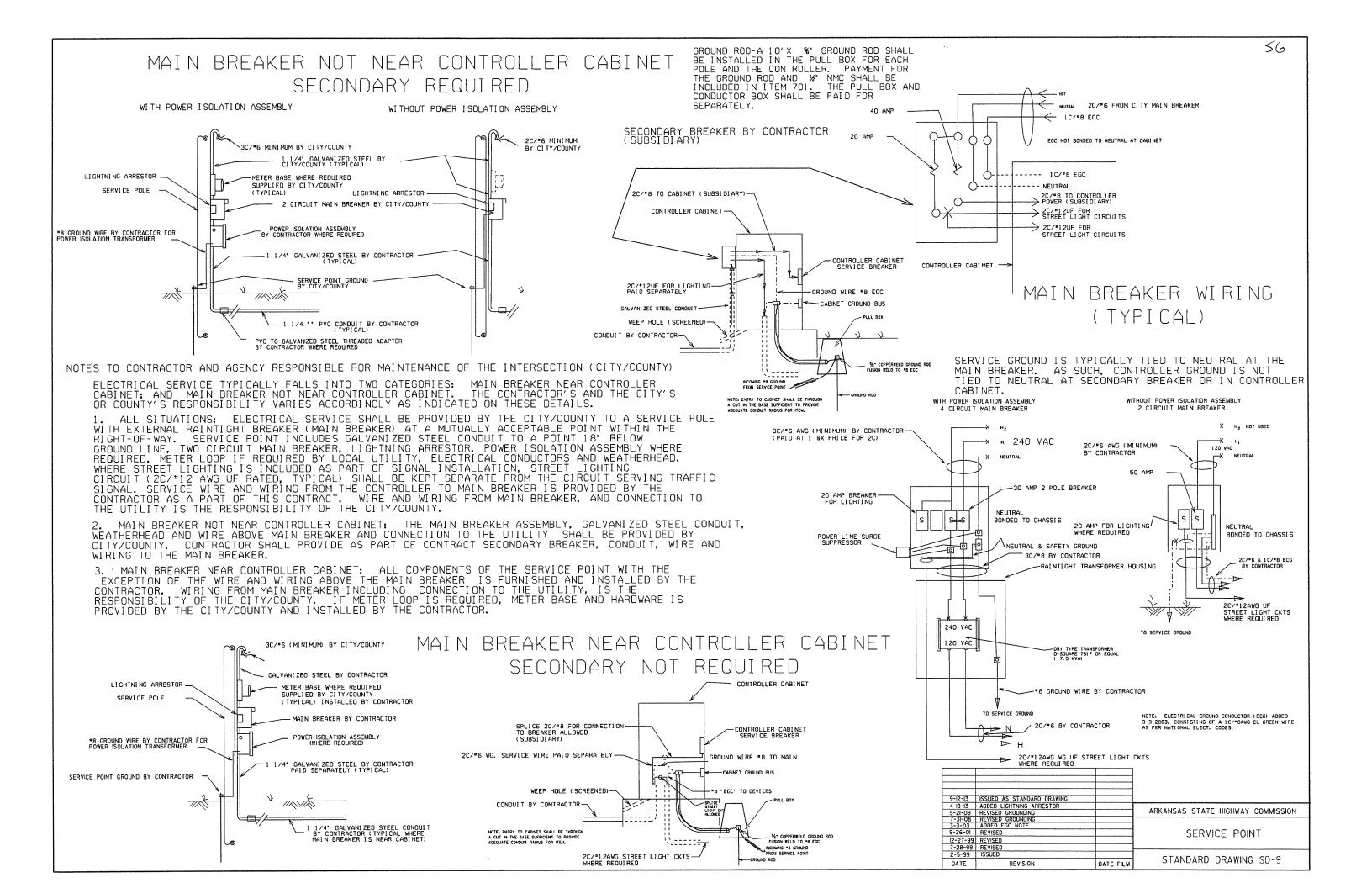
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

9-12-13	ISSUED AS STANDARD DRAWING		
5-21-09	REVISED GROUNDING		
7-31-08	ADDED & REVISED CONDUIT ENTRY		
6-23-04	REVISED CLEARANCE AT CURB ENTRY		ARKANSAS STATE HIGHWAY COMMISSION
1-4-02	ADDED REINFORCING TO BOX APRON		TARRESTO STATE MOTHER COMMISSION
7-2-01	REVISED		HEAVY DUTY PULL BOX
12-27-99	REVISED NOTES		TILAVI BOTT TOLL BOX
11-18-98	ISSUED		
DATE	REVISION	DATE EILM	STANDARD DRAWING SD-6



€ = CENTER OF LANE FROM APPROACH SIDE

	7		
			ARKANSAS STATE HIGHWAY COMMISSION
9-12-13	ISSUED AS STANDARD DRAWING		SIGNAL HEAD PLACEMENT
3-11-10	2009 MUTCD		SIGNAL HEAD I EACEMENT
12-9-99	ISSUED		
DATE	REVISION	DATE FILM	STANDARD DRAWING SD-8



NOTES, PED AND TRAFFIC SIGNAL HEAD SIGNS: EACH ITEM 'TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)' SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12' TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)" TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12' TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGN FACES SHALL BE CONSTRUCTED OF HIGH INTENSITY SHEETING (TYPE !!!) WITH SILKSCREEN LEGEND AND BORDER.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209. ALLOY 5052-H38) WITH

GENERAL NOTES:
1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF 4 FT. BEHIND CURB OR SHOULDER.

- 2. OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.
- 3. MINIMUM STRUCTURAL REQUIREMENTS:
  DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN ARM 60' OR LONGER.

USE FATIGUE CATEGORY II FOR STRUCTURES ON ROUTES WITH A SPEED LIMIT LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH ARMS LESS THAN 60' AND ROUTES WITH SPEED LIMITS OF 45 MPH AND LESS WITH

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE SPEED LIMIT IS 45 MPH AND LESS AND ARMS LESS THAN  $60^{\circ}$  .

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2003 EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

4 HEADS FOR OVER 26 FT. ARMS.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN 1/2' SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, 12 INCH, AND HAVE 5 IN, BACK PLATES:

HEADS AT END OF ARM - ONE 4 SEC., 85 LB., 16.0 SQ. FT. ONE SIGN MOUNTED 3 FT. FROM SIGNAL \* 2' X O\* X 2' \* 6', 20 LB. REMAINING HEADS SPACED A 8 FT. \* 3 SEC., 56 LB., TWO 5 SEC): 14.4 SQ. FT. DESIGN TO ACCOMMODATE (INCLUDING 2 HEADS FOR ARMS 10 TO 16 FT. 2 HEADS FOR ARMS 10 TO 16 FT.; INCLUDING LB. 3 HEADS FOR 18 TO 24 FT. ARMS:

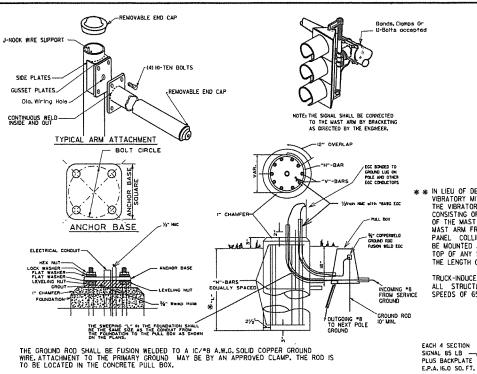
STREET NAME SIGN -- 72° X 18°, 36 LB., MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAN 12 FT. FROM POLE. DEPENDING UPON POSITION OF SIGNAL HEAD AD JACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) . VARIABLE ARM LENGTH (MAX.), 3.3 SQ. FT., 75 LB. PED SIGNALS -- TWO 2 SEC. 12 INCH MOUNTED 8 FT. FROM BASE OF POLE.

POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE

- POLE/MAST ARM CAP -- POLE AND MAST ARMS CAPS SHALL BE PROVIDED. FABRICATED OF EITHER STEEL OR CAST ALUM I NUM.
- HAND HOLE -- HAND HOLES SHALL BE 4 X 6 INCHES FOR STANDARD, AND 3 x 5 INCHES FOR PED POLES, MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACUUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL, POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDE A HAND HOLD WITHIN 12 INCHES OF MAST ARM(S) ATTACHMENT(S).
- 6. POLE/MAST ARM TAPER AND SLOPE AVERAGE TAPER OF SIGNAL ARMS AND POLE SHALL BE 0.125 TO 0.15 INCHES

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHALL MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE ARM SHALL MAINTAIN A POSITIVE AFTER IT IS PLACED UNDER LOAD.

NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.

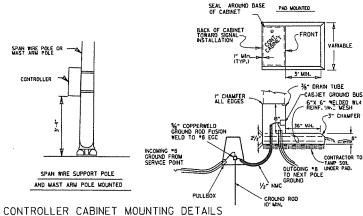


THE GROUND ROD SHALL BE FUSION WELDED TO A IC/\*8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX.

### TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

ARM	FDN.	FDN. DEPTH STEEL			
LENGTH	DI AMETER	"L" *	VERT.	HORZ.	0/C.
PED	30*	7′ -0•	12-*7 (6'-6*)	10-#4	8. 44'
2' to 12'	30"	10' ~6"	12-97 (10'-0")	15-#4	8. 42*
over 12' to 20'	30*	11'-6"	12-*7 (11'-0')	16-#4	8.66*
over 2D' to 35'	36*	12' -6"	13-#8 (12'-0")	17-=4	8.88*
over 35' to 50'	36"	13'-6"	13-#8 (13'-0")	19-#4	8, 56*
over 50' to 72'	42"	14'-6"	18-88 (14'-0")	20-*4	8. 74
Twins to 20'	30"	16' -0 <b>'</b>	12-*6 (15'-6*)	22~#4	8. 76'
Twins over 20' to 44'	36'	16'-0"	13-#8 (15'-6")	22-#4	8, 76
Twins over 44' to 50'	42"	16'-0"	18-#8 (151-6*)	22-#4	8.76*
Twins over 50' to 72'	42"	16'-6"	18-#8 (16'-0")	23-#4	8.64*



UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE DBSERVING THE CONTROLLER FRONT PANEL.

8. GROUND ROD - A 10' X 5/8' GROUND ROD SHALL BE INSTALLED IN THE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX. NUT, PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A 1/4' WEEP HOLE. ALL CONCRETE SHALL BE CLASS 'S' OR

SIGNAL OPERATION NOTES

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERMOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS, NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATIONS IN FLASH

SPECIAL NOTE: 90 MPH WIND ZONE DESIGN, SEE NOTE 3. MINIMUM STRUCTURAL REQUIREMENTS.

POLE TOP WITH 1/6"
J-HOOK WELDED ....
INSIDE POLE

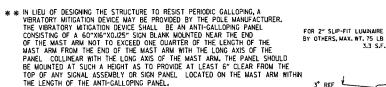
-SEE NOTE 6

MAST ARM MOUNTED SIGNAL - HEADS SHALL BE MOUNTED AT 17' TO 19' ABOVE ROADWAY

\* WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 18" OR LESS, NO INCREASE IN DEPTH "L" WILL BE REQUIRED, WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5"-6" OR LESS, INCREASE DEPTH "L" BY '-0". FOR LENGTHS GREATER THAN 5"-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND "4 TIES SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND "4 TIES SHALL BE PROVIDED FOR THE LENGTH OF THE STANDARD SPECIFICATIONS.

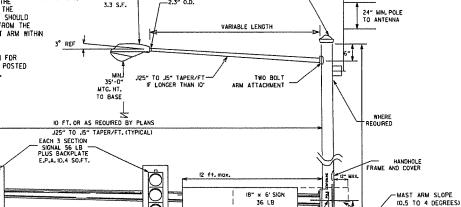
8" - 0" Min

MAY BE TWO PIECE ARM



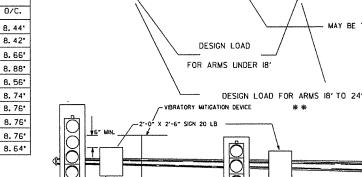
TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.

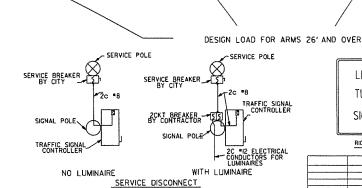
\* ★ VIBRATORY MITIGATION DEVICE



ALL POLES AND ARMS

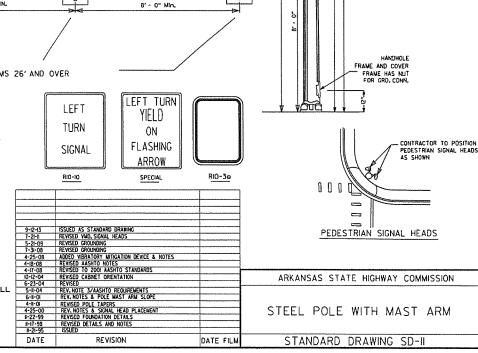
--2.3" O.D





10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS 'S' OR GREATER.

11. PEDESTRIAN PHASES - PEDESTRIAN MOVEMENTS SHALL BE PUSH BUTTON ACTUATED AND CONCURRENTLY TIMED, UNLESS OTHERWISE INDICATED ON THE PLAN SHEET(S). FURNISHING AND INSTALLING PED PUSH SWITCH SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM PEDESTRIAN SIGNAL HEAD.



DATE FILM

STANDARD DRAWING SD-II

EACH PED SIGNAL

SIGNAL BD LB E.P.A. B.O 50.FT.